

Influenza Key Points

June 30, 2011

Key Points: Influenza Vaccination Recommendation During Seasons When the Vaccine Composition Does Not Change & the Timing of Vaccination

Issues

- There may be confusion regarding whether people who were vaccinated against influenza last season need a vaccine this season since the vaccine composition for 2011-2012 remains the same as last season.
- There may be questions about the timing of vaccination in light of waning immunity.

Summary Messages

- CDC recommends an annual flu vaccine as the first and best way to protect against influenza. This recommendation is the same even during years when the vaccine composition (the viruses the vaccine protects against) remains unchanged from the previous season.
- This fall, everyone 6 months and older should get vaccinated against the flu as soon as 2011-2012 influenza vaccines become available, even if they got vaccinated last season.

Waning Immunity

- CDC recommends an annual flu vaccine as the first and best way to protect against influenza. This recommendation is the same even during years when the vaccine composition (the viruses the vaccine protects against) remains unchanged from the previous season.
- There are two reasons for getting a yearly flu vaccine:
 - The first reason is that because flu viruses are constantly changing, flu vaccines may be updated from one season to the next to protect against the most recent and most commonly circulating viruses.
 - The second reason that annual vaccination is recommended is that a person's immune protection from vaccination declines over time and annual vaccination is needed for optimal protection.
- Several studies conducted over different flu seasons and involving different influenza viruses and types of flu vaccine have shown that a person's protection against influenza viruses declines over the course of a year after vaccination, particularly in the elderly. So, a flu shot given during one season may not provide adequate protection through later seasons (see reference section below).
- The decline in protection against the flu that occurs after vaccination or after flu infection may be influenced by several factors, including a person's age, the antigen used in the vaccine, and the person's health situation (for example, chronic health conditions that weaken the immune system may have an impact).

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- This decline in protection has the potential to leave some people more vulnerable to infection, illness and possibly serious complications from the same influenza viruses a year after being vaccinated.
- So, for optimal protection against influenza, annual vaccination is recommended regardless of strain changes.

Background on Vaccine Virus Changes

- It's generally rare for the same three influenza virus strains to be chosen for the flu vaccine from one season to the next, but this has happened before.
- Since 1969, the viruses selected for inclusion in the flu vaccine have remained the same eight times (including the 2011-2012 season). Each time, CDC has stressed the importance of getting vaccinated each season.

The Timing of Vaccination

- This fall, everyone 6 months and older should get vaccinated against the flu as soon as 2011-2012 influenza vaccines become available, even if they got vaccinated last season.
- CDC recommends that influenza vaccination begin as soon as 2011-2012 flu vaccine becomes available and continue throughout the flu season. People should begin getting vaccinated as soon as vaccine becomes available in their community.
- It takes about two weeks after vaccination for antibodies to develop in the body and provide protection against influenza virus infection. Influenza season can begin as early as October and is unpredictable. Therefore, CDC recommends vaccination efforts begin as soon as vaccine becomes available to ensure that as many people as possible are protected before flu season begins.

References

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- [Song JY, Cheong HJ, Hwang IS, Choi WS, Jo YM, Park DW, Cho GJ, Hwang TG, Kim WJ. Long-term immunogenicity of influenza vaccine among the elderly: Risk factors for poor immune response and persistence. *Vaccine* 2010;29:3929-3935. \(PDF link\)](#)